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10/781,287

02/18/2004

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40627

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EXAMINER

BROOME, SAID A

ART UNIT

PAPER NUMBER

2628

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/781,287             | MASAKI, HIROYUKI    |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Said Broome            | 2628                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Response to Amendment***

1. This office action is in response to an amendment filed 6/25/2007.
2. Claims 1-3, 5, 8-10, 12, 15, 17, 19 and 20 have been amended by the applicant.
3. Claims 4, 6, 7, 11, 13, 14, 16 and 18 are original.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art at the time of invention to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 7-9 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura et al.(hereinafter "Nishimura", US Patent 3,756,011) in view of Kim (US Patent 6,661,428).

Regarding claims 1 and 8, Nishimura teaches a portable electronic apparatus (column 2 lines 14-16), a display means for displaying a plurality of display segments (column 3 lines 14-19), and also teaches indicating time in a display mode (column 3 lines 62-63, Figure 3).

Nishimura teaches a manipulation means for selecting any one of the display segments displayed by the display means (column 3 lines 19-21 and column 6 lines 3-6) and selecting a displayed time segment in which the time indicated in the time display mode is corrected (column 1 lines 36-41). Nishimura teaches a detecting means for detecting a selection by the manipulation means (column 1 lines 63-67 – column 2 lines 1-2) of any one of the display segments displayed

by the display means in the time display mode (column 1 lines 50-51). However, Nishimura fails to teach a display brightness control means during the time correction mode. Kim teaches a display control means for controlling the display means in accordance with the detection by the detecting means of the selection of the display segment displayed by the display means (column 1 lines 22-25 – lines 32-36), where the user interface utilizes the input data to enable detection of the input and to display the selection of display segments, so that the selected display segment has a display brightness higher than that of the other display segments displayed by the display means (column 2 lines 55-56 and 62-65), where the luminance or brightness of the display segments are selectively displayed brighter than the other displayed segments (Figure 13). Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to modify the light emitting display segments each selected for modification, as taught by Nishimura (column 6 lines 19-21), with the selective modification of the brightness of display segments on a light emitting display, as taught by Kim (column 1 lines 31-35, column 2 lines 62-65), because it would enable brightness control of displayed segments of any displayed segmented character, such as a digit, during a time correction in which the digits are displayed on a light emitting display. It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Nishimura with Kim because this combination would provide the selective manipulation of display elements in which the selected element would be brighter than the other segments thereby conserving energy otherwise necessary to collectively brighten all the elements in the display.

Regarding claims 2 and 9, Nishimura fails to teach the remaining limitations. Kim teaches a time counting means for counting an elapsed time period (column 2 lines 25-26), where

a time period of luminance is associated with a particular display segment, therefore a counting means is executed to count the time elapsed during the period. Kim also teaches that in response to the detection by the detecting means that the display segment has been selected by the manipulation means (column 1 lines 22-25 – lines 32-36), the display control means controls the display means to increase the brightness of the selected display segment to a first predetermined value (column 7 lines 3-8) where a display segment is selected to be displayed brighter to a predetermined value (Figure 12: “bright”). Kim also teaches that when the time counting means has counted a predetermined elapsed time period, the display control means controls the display means to decrease the brightness of the selected display segment to a second predetermined value lower than the first predetermined value (column 6 lines 51-54 and column 7 lines 2-4), where a display segment has an associated time period in which to be displayed brighter than the other, therefore after the time period has expired the segment is displayed at a lower luminance (Figure 13: “normal”). Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to modify the light emitting display segments each selected for modification, as taught by Nishimura (column 6 lines 3-6), with the modification of the level of brightness associated with the display segments over an elapsed period of time for display on a light emitting display, as taught by Kim (column 6 lines 51-54 and column 7 lines 2-4), because it would enable brightness control during a time correction for digits displayed on a light emitting display. It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Nishimura and Kim because this combination would provide conservation of energy by counting a predetermined time period in which when the time

period has been reached, the brightness of chosen display segments is decreased, thereby reducing power-consuming display of all the display segments for an extended period of time.

Regarding claims 7 and 14, Nishimura teaches a display means that comprises a self-luminous-type display device in column 3 lines 19-21.

Claims 5, 6, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura in view of Kim, in further view of Ogawa (US Patent 6,597,339) and in further view of Lee (US Patent 6,157,169).

Regarding claims 5, 6, 10 and 11, Nishimura and Kim fail to teach the limitations. Ogawa teaches a display control means for controlling the display means to decrease the display brightness time indicated by the indicator in accordance with a time counted by the time counting means (column 3 lines 59-67 and column 4 lines 1-8), where the predetermined elapsed period of time indicated by the CPU is sent directly to a display device (Figure 1). Ogawa also teaches the CPU sending the period of elapsed time and data that would enable the user to view and modify the level of luminance or brightness of the display (column 3 lines 59-67 and column 4 lines 1-8). However, Ogawa fails to teach displaying an indicator that displays a time counted by the time counting means. Lee teaches a time indicator that displays a time counted by a time counting means (column 9 lines 46-49, Figure 11). Therefore the elapsed time period determined by the CPU timer 101 in Figure 1 of Ogawa that is sent to the display device 28 illustrated in Figure 1, would be available for one of ordinary skill in the art to enable the determined elapsed time period to be displayed to the user as illustrated by Lee in Figure 11. It would have been obvious to one of ordinary skill in the art at the time of invention to combine

the teachings of Nishimura, Kim, Ogawa and Lee because this combination would provide conservation of energy by counting a predetermined time period in which when the time period has been reached, the brightness of the display would be decreased in response to the determined time period, thereby avoiding extended power-consuming display of all the display segments continually at a particular level of brightness.

Claims 3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura in view of Kim, in further view of Decker (US Patent 5,285,430).

Regarding claims 3 and 12, Nishimura fails to teach the limitations. Kim teaches that during an elapsed time period (column 2 lines 49-50 and column 6 lines 38-39), the display control means controls the display means to decrease a lit time ratio of the selected display segment (column 3 lines 1-9). However, Nishimura and Kim fail to teach a display brightness control means to cause the display segment selected by the manipulation means to blink while displayed. Decker teaches controlling the display to cause the display segment selected by a manipulation means to blink (column 3 lines 31-35). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Nishimura, Kim and Decker because this combination would provide selection of display segments that blink to indicate chosen segments and to decrease in brightness over an elapsed time period, thereby conserving energy.

Claims 4 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura in view of Kim, in further view of Nakagiri (US Patent 4,513,282).

Regarding claims 4 and 13, Nishimura and Kim fail to teach the limitations. Nakagiri teaches a selection control means for selectively supplying one of the display segments as a first display segment having a first predetermined size (lines 1-13 of the abstract), and another of the display segments as a second display segment having a second predetermined size smaller than the first predetermined size (column 5 lines 25-30), where display segments may be individually selected and the size of each of those segments contain a predetermined modifiable size (column 12 lines 57-60, column 1 lines 64-67 and column 2 lines 1-2). Nakagiri also illustrates a display means to display the display segment selected as the first display segment and a display means to display the second display segment as one of the display segments other than the display segment selected by the manipulation means, (Figures 15 and 16, respectively). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Nishimura, Kim and Nakagiri because this combination would provide selectable display segments that may be altered in size for display, which improves the visibility of display segments of interest during manipulation.

Claims 15, 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura in view of Nakagiri (US Patent 4,513,282).

Regarding claim 15, Nishimura teaches a portable electronic apparatus (column 2 lines 14-16), a display means for displaying a plurality of display segments (column 3 lines 14-19), and also teaches indicating time in a display mode (column 3 lines 62-63, Figure 3). Nishimura teaches a selection means for selecting one of the display segments of the display in the time display mode for modification of the selected display segment in a time correction mode in



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which the time indicated in the time display mode is corrected (column 6 lines 3-6 and in column 1 lines 36-41). Nishimura teaches a detecting means for detecting a selection by the manipulation means (column 1 lines 63-67 – column 2 lines 1-2) of any one of the display segments displayed by the display means in the time display mode (column 1 lines 50-51). Nishimura fails to teach a display control means for judging whether or not the selecting means has selected on the display segments of the display in accordance with the detection by the detecting means and, if it is judged that one of the display segments of the display has been selected by the selecting means, for controlling the display so that the display segment selected by the selecting means has a font larger than that of the other display segments. Nakagiri teaches judging whether or not the selecting means has selected one of the display segments of the display in accordance with the detection by the detecting means (column 2 lines 1-8), and if it is judged that one of the display segments of the display has been selected controlling the display so that during the time correction mode (column 8 lines 43-52, Figure 15), the display segment selected by the selecting means has a font size larger than that of the other display segments displayed by the display (column 2 lines 1-20: *“These basic segment units can be individually excited...the size of a numeral of character can be altered freely, as desired, by increasing the number of segments used to form...various sizes of numerals or characters...”* and column 8 lines 34-36: *“It is also possible to form segment...of larger size...”*). Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Nishimura and Nakagiri because this combination would provide the selective manipulation of display segments in which one segment would be larger than the other segments, which improves the visibility of the display segments and conserves energy.

Regarding claim 16, Nishimura teaches a display means that comprises a self-luminous-type display device (column 3 lines 19-21).

Regarding claim 18, Nishimura teaches a portable electronic apparatus that comprises a timepiece (column 9 lines 55-58, Figures 1A and 18). Nishimura also teaches display segments that comprise time display segments for displaying time (column 3 lines 1-6, Figure 1A: elements 32, 34 and 36).

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura in view of Nakagiri, in further view of Kim.

Regarding claim 17, Nishimura and Nakagiri fail to teach a display control means for controlling the display means so that the display segment selected by the manipulation means has display brightness higher than that of the other display segments. Kim teaches a display control means for controlling the display means so that the display segment selected by the manipulation means has a display brightness higher than that of the other display segments displayed by the display means (column 2 lines 55-56 and 62-65), where the luminance or brightness of the display is controlled where data lines of the display are selectively displayed brighter than the other displayed segments (Figure 13). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Nishimura, Nakagiri and Kim because this combination would provide the selective manipulation of display segments in which one segment would be brighter than the other segments thereby conserving energy.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura in view of Nakagiri in further view of Murakami (US Patent 4,472,066).

Regarding claim 19, Nishimura fails to teach the limitations. Nakagiri teaches a selection control means for selectively changing one of the display segments as a first display segment having a first predetermined size (lines 1-13 of the abstract), and another of the display segments as a second display segment having a second predetermined size smaller than the first predetermined size (column 5 lines 25-30), where display segments may be individually selected and the size of each of those segments are modified (column 12 lines 57-60, column 1 lines 64-67 and column 2 lines 1-2), therefore a second segment could be modified to a smaller size. Nakagiri also illustrates a display means to display the display segment selected as the first display segment and a display means to display the second display segment as one of the display segments other than the display segment selected by the manipulation means (Figures 15 and 16, respectively). However, Nishimura and Nakagiri fail to teach a time counting means for counting an elapsed time period, wherein when the time counting means has counted a predetermined elapsed time period, the font size of the display segment is decreased. Murakami teaches a time counting means for counting an elapsed time period, wherein when the time counting means has counted a predetermined elapsed time period, the font size of the display segment is changed (column 17 lines 51-52 and column 18 lines 44-47), during a time correction mode (Figure 4), therefore one of ordinary skill in the art would have been capable of providing the font size of the display segment to be changed to a smaller size. It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Nishimura, Nakagiri and Murakami because this combination would provide conservation of energy,

otherwise required to continually display larger display elements on a display, by decreasing the size of the display segment after particular time period has been counted.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura in view of Nakagiri, in further view of Murakami and in further view of Kim.

Regarding claim 20, Nishimura and Nakagiri fail to teach the limitations. Murakami teaches controlling the display to cause the display segment selected by a manipulation means to blink (column 21 lines 32-35). However, Nishimura, Nakagiri and Murakami fail to teach that during an elapsed time period, the display is controlled to decrease a lit time ration of the selected display segment. Kim teaches that during an elapsed time period (column 2 lines 49-50 and column 6 lines 38-39), that the display brightness control means controls the display means to decrease a lit time ratio (column 3 lines 4-9) of the selected display segment (column 2 lines 63-65). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Nishimura, Nakagiri, Murakami and Kim because this combination would provide selective display segment that blink and decrease in brightness over an elapsed time period, thereby conserving energy.

### ***Response to Arguments***

Applicant's arguments filed 6/25/07 have been fully considered but they are not persuasive.

The applicant argues that the references Nishimura in view of Kim used in the 35 U.S.C. 103(a) rejection of claim 1 do not teach detecting means for detecting a selection by the

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manipulation means of any one of the display segments displayed by the display means in the time display mode, and display control means for controlling the display means in accordance with the detection by the detecting means of the selection of the display segment displayed by the display means so that during the time correction mode, the selected display segment has a display brightness higher than that of the other display segments displayed by the display means. The rejection is maintained because Kim teaches a detecting means for detecting a selection by the manipulation means of any one of the display segments displayed by the display means (column 1 lines 22-25 – lines 32-36), where the user interface enables detection of the input data and displays the display segment selection, so that the selected display segment has a display brightness higher than that of the other display segments displayed by the display means (column 2 lines 55-56 and 62-65, Figure 13). Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to modify the display segments of Kim to enable the selective luminance manipulation of display segments during a time correction mode because the display segments of Kim are provided on a light emitting display (column 1 lines 33-35, column 2 lines 62-65), which is known in the art to be utilized for timepiece devices, as taught by Nishimura (column 6 lines 3-6), and would therefore enable the selective luminance modifications to the display segments of Kim to be implemented during a time correction mode on a light emitting display.

The applicant argues that the references Nishimura in view of Kim used in the 35 U.S.C. 103(a) rejection of claim 1 do not teach selecting any one of the display segments displayed by the display means in the time display mode for modification of the selected display segment in a time correction mode. However, Nishimura teaches selecting any one of the display segments

displayed by the display means (column 4 lines 61-63 and column 6 lines 3-6) in the time display mode for modification of the selected display segment in a time correction mode (column 1 lines 36-41).

The applicant argues that the references Nishimura in view of Nakagiri used in the 35 U.S.C. 103(a) rejection of claim 15 do not teach controlling or adjusting the size of a display element in a display device during a time correction mode of an electronic apparatus having such display device. The examiner maintains the rejection because Nakagiri teaches controlling or adjusting the size of a display element in a display device (column 2 lines 1-20: “...*segment units can be individually excited...the size of a numeral of character can be altered freely, as desired, by increasing the number of segments used to form...various sizes of numerals or characters...*” and column 8 lines 34-36: “*It is also possible to form segment...of larger size...*”) during a time correction mode of an electronic apparatus having such display device (column 8 lines 41-52, Figure 15).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Said Broome whose telephone number is (571)272-2931. The examiner can normally be reached on M-F 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ulka Chauhan can be reached on (571)272-7782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Said Broome/  
Art Unit 2628  
8/21/07

  
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SUPERVISORY PATENT EXAMINER